

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION**

ROTHSCHILD CONNECTED  
DEVICES INNOVATIONS, LLC,

Plaintiff,

V.

THE COCA-COLA COMPANY,

Defendant.

**Civil Action No.**  
**1:16-cv-01241-TWT**

**THE COCA-COLA COMPANY’S MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT AND INVALIDITY**

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## I. INTRODUCTION

This is a patent infringement action, in which RCDI accuses Coca-Cola of infringing U.S. Patent No. 8,417,377 (“the ’377 Patent”) by commercializing its Freestyle dispenser. In particular, Plaintiff Rothschild Connected Devices Innovations, LLC (“RCDI”) contends that the ’377 Patent prohibits the unauthorized use of Coca-Cola’s “Freestyle App” (an “app” that runs on a cellphone) to wirelessly transmit a favorite beverage previously stored on a user’s cellphone up to a server, and for that server to then forward that favorite beverage to a Freestyle dispenser, so that the dispenser can dispense the favorite beverage.

From the outset of this litigation, Coca-Cola has repeatedly informed RCDI that Coca-Cola cannot infringe the ’377 Patent, because every asserted claim requires a “mixing chamber.” (SUMF at ¶10). The Freestyle dispenser does not have a “mixing chamber.” (*Id.* at ¶¶133-135). And this is not an argument developed to avoid an infringement allegation. No, Coca-Cola specifically designed its Freestyle dispensers to eliminate mixing anywhere within the dispenser itself. (*Id.*).

The Freestyle dispenser can dispense over 100 different flavored beverages from a single nozzle. (*Id.* at ¶103). To avoid any flavor “cross-over” from one dispensed beverage to the next, Coca-Cola developed an “air-mix” nozzle to keep the flavors segregated until they are outside of the dispenser – i.e., they mix in the air beneath the nozzle. (*Id.* at ¶¶133-135).

The operation of the air-mix nozzle is no secret. Coca-Cola has been publicly touting the benefits of its air-mix nozzle for years. In February 2015, for example, Georgia Tech’s School of Mechanical Engineering published a feature story covering several of its graduates who were involved in the design of the revolutionary Freestyle dispenser. Georgia Tech featured the air-mix nozzle in its discussion with its 1994 mechanical engineering graduate, Marc Katz (then, Coca-Cola’s Freestyle VP of Global Operations):

To illustrate how complex the Coca-Cola Freestyle micro-dosing and dispensing technology is the dispensing nozzle itself boasts three patents, Katz says. “To make sure flavors don’t mingle from drink to drink, only pure still or soda water touch the plastic part of the nozzle—the flavor ingredients are mixed mid-air,” he says.

(*Id.* at ¶134; Exhibit 8 to C. Dennis Deposition, Georgia Tech Alumni Magazine, Feb. 2015, pp. 36-38.)

Coca-Cola's non-infringement defense is simple: the Freestyle dispenser cannot infringe the '377 Patent because it does not have a "mixing chamber," as required by every asserted claim. As is outlined below, RCDI has changed its infringement theories several times in this case – especially as to which component of the Freestyle dispenser RCDI alleges satisfies the "mixing chamber." (SUMF at ¶¶21-44). RCDI's current position was stated for the first time in RCDI's expert report on infringement, in which RCDI's expert identifies the Freestyle's air-mix nozzle as the "mixing chamber" of the '377 Patent. (*Id.* at ¶47).

Even though RCDI obtained the claim construction it sought for the term "mixing chamber," it still cannot prove infringement because the Freestyle simply has no "area where beverage elements are combined." (*Id.* at 133-135). The air-mix nozzle assembly identified by RCDI's expert is a well-known, well publicized component of the Freestyle dispenser. Indeed, RCDI found the Georgia Tech Alumni article on the internet and used it as an exhibit in a deposition it took on March 15, 2016. (*Id.* at

¶134 (Exhibit 8 to RCDI's Deposition of C. Dennis (Georgia Tech Alumni Magazine, Feb. 2015, pp. 36-38))

For over two years, therefore, RCDI has known that the Freestyle dispenser uses an air-mix nozzle, but has still pursued this case against Coca-Cola. (*Id.*). For the almost three years since this case was first filed, Coca-Cola has been unsuccessfully pressing RCDI for specific infringement allegations. (*Id.* at ¶¶21-44). Until serving its expert report on infringement on April 4, 2018 – long after the close of fact discovery – RCDI has steadfastly refused to identify the claims it was asserting, or even identify the components of the Freestyle that satisfied the elements of the claim. (*Id.*) Coca-Cola's efforts to obtain RCDI's infringement contentions are detailed below.

Coca-Cola's invalidity defense is also simple: the '377 Patent is invalid over several prior art references that disclose beverage dispensers that were connected to a server over a network to provide access to a user's product preferences or user profile. (*Id.* at Exs. 34-40). A summary of the invalidity analysis of the '377 Patent with respect to the "Boland

Patent” is provided below. Detailed analyses of the Boland Patent and several other patents are attached as claims charts to this Motion. (*Id.*).

More importantly, perhaps, is that RCDI’s expert has submitted an expert report on invalidity that not only fails to rebut Coca-Cola’s expert’s invalidity analysis, but also fails to address even one claim of the ’377 Patent. (*See generally* Curley Rebuttal Invalidity Report (Ex. 41)). Coca-Cola’s motion for summary judgment of invalidity should be granted on the basis that RCDI’s expert cannot testify at trial so far outside the scope of his expert report as to enable RCDI to rebut Coca-Cola’s *prima facie* case of invalidity.

Coca-Cola respectfully requests that the Court enter summary judgment in its favor as to non-infringement, invalidity, and no willful infringement.

## **II. UNDISPUTED FACTS**

Coca-Cola’s Statement of Undisputed Material Facts has been filed concurrently with this Motion. The undisputed material facts set forth in the arguments below cite to that statement, using SUMF at *xx* notation.

### III. LEGAL STANDARDS

Summary judgment is appropriate only when the pleadings, depositions, and affidavits submitted by the parties show no genuine issue of material fact exists and that the movant is entitled to judgment as a matter of law. FED. R. CIV. P. 56(a). The court should view the evidence and any inferences that may be drawn in the light most favorable to the nonmovant. *Adickes v. S.H. Kress & Co.*, 398 U.S. 144, 158-59 (1970). The party seeking summary judgment must first identify grounds to show the absence of a genuine issue of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323-24 (1986). The burden then shifts to the non-movant, who must go beyond the pleadings and present affirmative evidence to show that a genuine issue of material fact exists. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 257 (1986). “A mere ‘scintilla’ of evidence supporting the opposing party’s position will not suffice; there must be a sufficient showing that the jury could reasonably find for that party.” *Walker v. Darby*, 911 F.2d 1573, 1577 (11th Cir. 1990).

#### **IV. ARGUMENT**

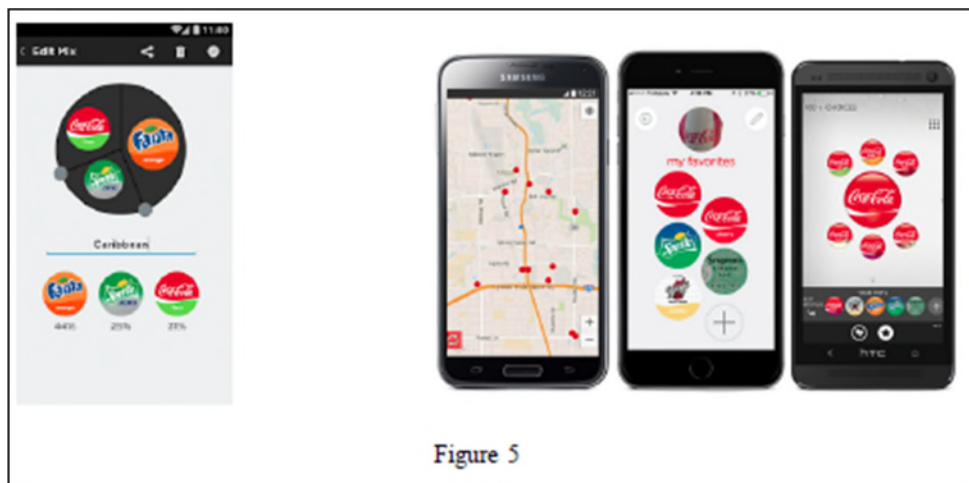
##### **A. The Court Should Enter Summary Judgment of Non-Infringement**

To prove infringement of the '377 Patent, RCDI must prove that the Freestyle dispenser includes each and every element of every asserted claim. RCDI cannot prevail on proving infringement, because the record is devoid of evidence capable of supporting a verdict of patent infringement at trial. Moreover, RCDI has assiduously avoided revealing its infringement contentions, until after fact discovery was over. (SUMF at ¶¶21-44). RCDI should not be permitted to benefit from its gamesmanship.

##### **1. RCDI Waited Until After the Close of Fact Discovery to Disclose its Infringement Contentions to Coca-Cola**

This action was transferred to this District from the Southern District of Florida in 2016. (*Id.* at ¶21). Because the parties had already filed their opening claim construction briefs in Florida, this Court declined Coca-Cola's request to order RCDI to comply with Local Patent Rule 4.1 by serving infringement contentions. (*Id.* at ¶¶21-22; Ex. 10, Transcript of Dec. 1, 2016 Status Conference).

In its original complaint filed on October 30, 2015, RCDI provided only a cursory statement of how some of the components of the Freestyle dispenser correspond to some elements of Claim 11 of the '377 Patent. For example, RCDI identifies Claim 11's "compartments containing an element of a beverage" as the Freestyle's micro-ingredient cartridges, containing "the various Coca-Cola branded beverage flavors" (Doc. 1 at ¶¶28). RCDI also claims that "each of these flavor compartments contains at least one valve coupling [sic]." (*Id.*) RCDI also identified the Coca-Cola Freestyle App as satisfying two elements of Claim 11: (1) the "user interface module" that receives user and beverage identifiers, and (2) the "communication module." (*Id.* at ¶¶29-30.)



Finally, RCDI alleged in its original complaint that the Freestyle dispenser’s “controller” is coupled to the “communication module” and the “user interface module” (i.e., the Freestyle App running on a mobile device) via a network connection to Coca-Cola’s servers, “thereby embodying the last limitation present in claim 11 of the ‘377 patent” (*id.* at ¶31). RCDI closed its cursory infringement analysis by alleging that “once the beverage dispenser controller receives the user-desired beverage mix, it actuates the at least one valve and dispenses into the mixing chamber the various flavors associated with the user-desired beverage mix.” (*Id.*)

On December 2, 2016, Coca-Cola served its first interrogatory on RCDI, which mirrors the language of LPR 4.1 (SUMF at ¶23):

**INTERROGATORY NO. 1:** Identify each claim of the '377 Patent that You contend Coca-Cola has infringed, and for each identified claim, state the entire factual basis for Your contention that the claim is infringed, including without limitation: (i) an identification of each accused apparatus, method, composition, or other accused instrumentality; (ii) where each element of each claim is found within each accused instrumentality, including the identity of the structures, acts, or materials in the accused instrumentalities that perform the claimed function; and (iii) whether each element of each asserted claim is claimed to be literally present, present under the doctrine of equivalents, or both, in each accused instrumentality that performs the claimed function.

RCDI first responded to Interrogatory No. 1 on January 3, 2017. RCDI served a supplemental response on January 4, 2017, and served a second supplemental response on January 10, 2017, in response to Coca-Cola's objections to the inadequacy of its responses. (*Id.* at ¶24). Nonetheless, RCDI has never fully responded to Coca-Cola's Interrogatory No. 1 – even though the interrogatory sought exactly the same basic information required from every plaintiff that files a patent infringement action in this District. (*Id.* at ¶25).

RCDI's original complaint alleges only infringement of Claims 1 and 11 of '377 Patent. (*Id.* at ¶9). RCDI subsequently withdrew Claim 1, in response to Coca-Cola's insistence that RCDI's infringement

allegations regarding Claim 1 were impossible. (*Id.* at ¶¶13, 14.) In its response to Interrogatory No. 1, RCDI has never identified any specific claims other than that it “intends to assert only claim 11 of the ’377 Patent, and dependent claims therefrom.” (SUMF at ¶17.)

Despite this Court’s May 16, 2018 order that “RCDI shall re-file its Amended Complaint, which shall be the operative complaint in this case,” RCDI never filed an amended complaint.<sup>1</sup> (SUMF at ¶15). In its proposed amended complaint, RCDI alleged that Coca-Cola infringes Claims 11-13, 15, 17, 19 and 21-25 of the ’377 Patent. (*Id.* at ¶16; Doc. 35-1 at ¶4).

To this day, RCDI has made no formal allegation that Coca-Cola infringes any particular claims of the ’377 Patent, other than Claim 11. (SUMF at ¶17.) Indeed, with only one week remaining before Coca-Cola’s expert report on invalidity was due – RCDI’s counsel sent an email to inform Coca-Cola’s counsel that it was alleging infringement of the claims listed in its proposed amended complaint (i.e., Claims 11-13, 15,

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<sup>1</sup> For the purposes of this discussion of RCDI’s infringement contentions, Coca-Cola assumes that RCDI would have filed an amended complaint substantively identical to the one proposed in its motion.

17, 19 and 21-25). (*Id.* at ¶18.) RCDI's counsel also stated that it would "drop claims 13, 15, 19, 24 and 25 from that list." (*Id.*) Coca-Cola learned for the first time that RCDI had apparently also dropped Claim 17, when it received RCDI's April 4, 2018 expert report regarding infringement. (*Id.* at ¶19.)

RCDI never amended its response to Interrogatory No. 1 to formally include the claims listed in its proposed amended complaint, or the claims RCDI dropped from the case on March 21, 2018 and April 4, 2018. (*Id.* at ¶25). RCDI's response to Interrogatory No. 1 remains limited to an allegation that Coca-Cola infringes Claim 11 of the '377 Patent. (*Id.* at ¶¶17, 20)

Because RCDI has only ever specifically alleged infringement of Claim 11 of the '377 Patent, RCDI should be precluded from alleging Coca-Cola's infringement of any other claim of the '377 Patent.

## **2. RCDI Failed to Meet its Disclosure Obligations**

### **a) Claims 12 and 21-23**

For every claim that RCDI failed to formally allege infringement, the Court should enter summary judgment of non-infringement. Even though the Court declined to require RCDI to serve infringement

contentions under LPR 4.1, the parties have proceeded under the Local Patent Rules for all other purposes. (*See, e.g.*, Doc. 69, Joint Motion to Modify Pretrial Scheduling Order)

The Local Patent Rules expressly decline to “excuse any party from responding to any proper discovery request made under the Federal Rules of Civil Procedure,” except that a party may delay its responses, if the Local Patent Rules provide for a such a delay for a specific type of disclosure (e.g., infringement contentions). LPR 3.1(a). Moreover, the Local Patent Rules expressly state that a party’s infringement contentions “shall have such binding effect on a party as a response to an interrogatory under Rule 33 of the Federal Rules of Civil Procedure.”

Before and after the 2004 effective date of this District’s Local Patent Rules, a patent infringement plaintiff must comply with the Federal Rules of Civil Procedure. This District’s implementation of its Local Patent Rules does not excuse RCDI from responding to Coca-Cola’s proper discovery request. When this Court declined to require RCDI to serve infringement contentions, it did not also excuse RCDI from complying with the Federal Rules of Civil Procedure.

Coca-Cola's Interrogatory No. 1 requested that RCDI "[i]dentify each claim of the '377 Patent that [RCDI] contend[s] Coca-Cola has infringed." (SUMF at ¶23.) Because RCDI has only ever identified Claim 11 of the '377 Patent, RCDI should be precluded from alleging Coca-Cola's infringement of any other claim of the '377 Patent.

**b) Claim 11**

Coca-Cola's Interrogatory No. 1 also requested for each asserted claim, that RCDI identify:

the identity of the structures, acts, or materials in the accused instrumentalities that perform the claimed function; and (iii) whether each element of each asserted claim is claimed to be literally present, present under the doctrine of equivalents, or both, in each accused instrumentality that performs the claimed function

(*Id.*) Even as to Claim 11, RCDI failed to fully respond to Interrogatory No. 1. (*Id.* at ¶¶29-42) Instead, RCDI responded to Interrogatory 1 by (1) providing a set of PowerPoint slides that vaguely refer to some but not all of the elements of Claim 11 (*id.* at ¶¶31-37), (2) identified eight of Coca-Cola's (not RCDI's) patents that RCDI claims "identify a component of the Freestyle dispenser [alleged] to be a 'mixing chamber'" (*id.* at ¶38); (3) identified a one-page document of one of Coca-Cola's third-party

vendors that includes the term “mixing chamber” (*Id.* at ¶¶39-40); and (4) identified portions of the eight Coca-Cola patents mentioned above, that RCDI claims disclose “mixing chambers.” (*Id.*)

The text of RCDI’s twice-supplemented response to Interrogatory No. 1 does not refer to any element of Claim 11, except for the “mixing chamber,” and does not identify any structure of the Freestyle dispenser as corresponding to the “mixing chamber” recited by Claim 11. (*Id.* at ¶¶29-41).

The seven-page set of PowerPoint slides that RCDI prepared in response to Interrogatory No. 1 refers only vaguely to the elements of Claim 11, and fails to specifically point out the components of a Freestyle dispenser that RCDI alleges meet the elements of Claim 11. (*Id.* at ¶¶31-37.) The document states, for example, that the Freestyle dispenser has “cartridges,” but does not specifically allege that the Freestyle’s cartridges are the “compartments” required by the claims. (*Id.* at ¶32.) The document states that the Freestyle dispenser has “at least one valve,” but does not identify any part of the Freestyle that constitutes a valve. (*Id.* at ¶33.) Regarding the “mixing chamber,” the document

merely states that the “mixing chamber is provided at or near the exit port of the Coca-Cola beverage dispenser.” (*Id.* at ¶34.) The document does not specifically identify a “user interface module,” but depicts photograph of what appears to be a cellphone running the Freestyle App, and another photograph of the Freestyle dispenser’s touchscreen display. (*Id.* at ¶35.)

The document mentions “communication module” and “controller” elements of Claim 11, but fails to identify any component of the Freestyle dispenser that RCDI alleges satisfies the “communication module” element of Claim 11. (*Id.* at ¶¶ 36-37.) Similarly, the PowerPoint document completely fails to mention any portions or functions of the Freestyle dispenser that satisfy the remaining elements of Claim 11, including the “identity of a user,” “identifier of a beverage,” or “user generated product preferences.”

RCDI never bothered to demonstrate how the eight Coca-Cola patents it identified in response to Interrogatory No. 1 might suggest that the Freestyle has a “mixing chamber.” (*Id.* at ¶¶39-41.) Indeed, RCDI never even established in the record any evidence of whether Coca-Cola

even uses the technologies described in those patents – in the Freestyle dispenser or otherwise. Regardless, upon serving its expert witness’s report on infringement, RCDI has now abandoned the claim that any of those patents depicts the “mixing chamber” recited in Claim 11 of the ’377 Patent.

As fact discovery was closing, Coca-Cola again gave RCDI a chance to identify the components of Claim 11 in the Freestyle dispenser. Coca-Cola served its Interrogatory Nos. 21-25, which requested that RCDI specifically identify the component satisfying the primary elements of Claim 11 – i.e., the “mixing chamber,” the “user interface module,” the “communication module,” and the “controller.” RCDI again refused to identify these elements of Claim 11, responding the same way to each interrogatory:

RCDI objects to this interrogatory as unduly burdensome to the extent it is duplicative of Interrogatory No. 1 served on December 12, 2016. RCDI further objects to this interrogatory because it seeks information that will be the subject of expert testimony that will be disclosed in accordance with the Federal Rules of Civil Procedure and the Court’s schedule, and subject to obtaining remaining fact discovery that TCCC has yet to produce. RCDI’s investigation and analysis are ongoing and RCDI reserves the right to amend, modify, and/or supplement this response.

*Id.* at ¶44.

This District’s Local Patent Rules have been characterized as an “exercise in forced door closing,” because they operate to force the parties to take infringement and invalidity positions early in the litigation and stick to them. *McKesson Info. Sols. LLC v. Epic Sys. Corp.*, 495 F. Supp. 2d 1329, 1332 (N.D. Ga. 2007). “[T]hese requirements put the parties on notice early in the discovery process of the infringement and invalidity issues in the case.” *Graco Children's Prod. Inc. v. Kids II, Inc.*, No. 1:13-CV-1183-TWT, 2018 WL 1509192, at \*4 (N.D. Ga. Mar. 26, 2018) (J. Thrash). Because parties are required to take positions early in the case, “[the Local Patent Rules] “discourage gamesmanship and tend to facilitate early resolution of the dispute.”” *Id.* (quoting *McKesson.*, 495 F. Supp. 2d at 1332 (N.D. Ga. 2007)).

Because RCDI has steadfastly refused to respond to Coca-Cola’s good faith efforts to discover RCDI’s infringement allegations, and because RCDI never disclosed its contentions until fact discovery was long over, this Court should grant summary judgment of non-infringement.

### **3. The Freestyle Dispenser Has No “Mixing Chamber for Mixing a Beverage”**

To address the substance of RCDI’s infringement allegations, Coca-Cola has assumed that RCDI has now adopted the substance of Charles Curley’s expert report on infringement as its formal infringement contentions in this action. Mr. Curley’s April 4, 2018 expert report on infringement was the first time RCDI disclosed its infringement theory to Coca-Cola. (SUMF at ¶¶46-47). After almost three years of litigation, Mr. Curley’s expert report provided completely new theories regarding the identity of components within the Freestyle dispenser corresponding to, among other things, the mixing chamber, the user interface module, and the valves.

Though Mr. Curley’s infringement theories are new, they again fail to demonstrate infringement. Accordingly, the Court should grant summary judgment of non-infringement.

#### **a) The Freestyle Dispenser Uses an Air-Mix Nozzle Specifically Designed to Eliminate Mixing within the Dispenser**

Claim 11 requires a “mixing chamber for mixing [a] beverage.” The Court construed “mixing chamber” to mean “an area where beverage

elements are combined.” To prove infringement of Claim 11, therefore, RCDI must prove that the Freestyle has “an area where beverage elements are combined for mixing [a] beverage.”

The Freestyle has no area in which beverage elements are combined, because the components of a beverage dispensed by a Freestyle do not combine with each other until they are outside the dispenser – i.e., in the air below the nozzle. (SUMF at ¶¶114, 115, 133-135). The Freestyle uses an air-mix nozzle that prevents the micro-ingredients from mixing with one another until they are “in the air” between the nozzle and the user’s cup. (*Id.*) The purpose of the air-mix nozzle is to make sure flavors do not “mingle” from one dispensed drink to the next. (*Id.*) Only still or carbonated water and high fructose corn syrup (HFCS) touch any portion of the Freestyle’s nozzle, and the flavor ingredients are mixed in mid-air. (*Id.*) Because there is no area in the Freestyle in which “beverage elements are combined,” the Freestyle cannot have a “mixing chamber.” (*Id.*)

In its April 4, 2018 expert report on infringement, RCDI alleges for the first time, that portions of the Freestyle’s nozzle assembly constitute

a “mixing chamber.” (*Id.* at ¶47). But this is impossible because Claim 11 requires that the “elements” from the “compartments” be combined a mixing chamber, which is an area of the dispenser in which “beverage elements are combined.” Because it uses an air-mix nozzle, there is no area in the Freestyle in which “beverage elements are combined.” (*Id.* at ¶¶133-135).

Apparently acknowledging this impossibility, RCDI now alleges that not only are the Freestyle’s micro-ingredients “elements” of a beverage contained in a “compartment,” but so too are water, carbonated water, and corn syrup. (*Id.* at ¶52.) It is undisputed that HFCS syrup is contained in a bag-in-box type container *outside* of the Freestyle dispenser. (*Id.* at ¶113.) According to Claim 11, therefore, HFCS cannot be an “element of a beverage,” because it is not contained within a “compartment” of the Freestyle dispenser.

Water is fed into the Freestyle dispenser from a source, such as a municipal water line. (*Id.* at ¶130.) It is undisputed that there is no “compartment” in the Freestyle in which water is contained. According

to Claim 11, water cannot be an “element of a beverage,” because it is not contained within a “compartment” of the Freestyle dispenser.

Finally, carbonated water is fed into the Freestyle as flat water – from a source, such as a municipal water line. (*Id.*) Carbonated water is made within the Freestyle from regular water that is exposed to CO<sub>2</sub> gas as the water passes through the Freestyle dispenser. (*Id.* at ¶¶128-131.) RCDI’s expert now contends that a carbonation tank within the Freestyle is a “compartment” within the meaning of Claim 11. But this is not so.

The Freestyle’s “carbonation tank” is simply a wider region of the tubing through which carbonated water continuously flows in the Freestyle. (*Id.* at ¶¶125-131.) The widened area is used to increase the surface area of the water that is exposed to CO<sub>2</sub>. (*Id.*) But the “carbonation tank” is not sealed at either end, and does not contain carbonated water any more than any other portion of the Freestyle’s tubing contains the fluid flowing through it. (*Id.* at ¶¶130-131.) When a carbonated drink is being dispensed, the carbonation tank is not being emptied. As with regular water in the Freestyle, the carbonation tank is

continuously resupplied from the municipal water source. (*Id.* at 125-131.)

RCDI's expert has identified as a "mixing chamber" a portion of the Freestyle's nozzle assembly through which only water, carbonated water, and corn syrup can flow. (*Id.* at ¶¶47, 132.) Because water, carbonated water, and corn syrup are not "contained" within "compartments" in the Freestyle, they cannot be "elements of a beverage" within the meaning of Claim 11. Because Claim 11 requires a "mixing chamber" that is an "area where beverage elements are combined," the Freestyle does not have a "mixing chamber."

**b) The Freestyle Dispenser Does Not Use Valves to Dispense Micro-Ingredients**

There is no dispute that the "beverage elements" recited by Claim 11 must be contained in the dispenser "compartments" of Claim 11. (*Id.* at ¶49.) The "compartment" of Claim 11 must be coupled by a "valve" to a "dispensing section." (Col. 9, ll. 46-48.) Claim 11 requires that those valves must be actuated by a controller "to control an amount of the element to be dispensed." (Col. 9, ll. 60-62.)

In the Freestyle, the micro-ingredient cartridges are not coupled to valves capable of controlling an amount of the micro-ingredient to be dispensed. (*Id.* at ¶¶57, 121, 139-141) It is not disputed that the Freestyle uses pumps to pull micro-ingredients from each flavor cartridge. (*Id.* at ¶¶139-141.) RCDI has never identified a valve used in the Freestyle to control the dispensing of a micro-ingredient, because no such valve exists. (*Id.*) As RCDI's expert has admitted, a valve and a pump are not the same thing. (*Id.* at ¶57.)

Because the Freestyle's micro-ingredient cartridges are not coupled to anything by valves that "control an amount of [a beverage] element to be dispensed," the Freestyle's micro-ingredient cartridge cannot satisfy the "compartment" of Claim 11.

**c) The Freestyle Dispenser Cannot Actuate Its Nozzle Assembly**

Finally, the "mixing chamber" of Claim 11 must be capable of being actuated by a "controller" that this Court has held is "capable of causing the mixing chamber to mix a beverage *responsive* to the user's beverage product preferences." (*Id.* at ¶¶ 68.4, 68.10; Doc. 79 at 26.) The term "responsive" in this construction does not modify the term "beverage."

Rather, it modifies the term “mix.” That is, the mixing chamber’s mixing must be done in a way that is “responsive” to a user’s product preferences.

RCDI’s expert has identified a fixed portion of the Freestyle’s nozzle assembly as the “mixing chamber” of Claim 11. (*Id.* at ¶47.) That portion of the nozzle assembly cannot be the mixing chamber of Claim 11, however, because it is physically fixed, and has no moving parts. (*Id.* at ¶¶59-61.) The nozzle assembly does not change position, shape, or any other characteristic from one dispensed beverage to the next. (*Id.*) The nozzle assembly simply cannot be caused (by a controller) to “mix a beverage responsive to the user’s beverage product preferences.” Indeed, the nozzle assembly operates the same way every time, regardless of any user’s product preferences.

#### **4. The Freestyle Dispenser Has No “Dispensing Section”**

Claim 11 requires a beverage dispenser to contain “a dispensing section configured to dispense the beverage.” The Court construed “dispensing section” to mean “a component for directing the flow of a beverage.” To prove infringement of Claim 11, therefore, RCDI must prove that the Freestyle contains “a component for directing the flow of

*a beverage* configured to dispense *the beverage*” (emphasis added). As stated above, a “beverage” is a homogenous mixture of all beverage elements, as defined by one of ordinary skill in the art. [*Id.* at ¶¶8, 112]. There is no area of the Freestyle that combines all beverage elements into a homogenous mixture prior to dispensing.

No physical part of the Freestyle dispenser even forms, never mind releases, a “beverage,” and so the Freestyle dispenser has no component for directing the flow of a *beverage*. As discussed earlier, the air-mix nozzle does not combine or mix all beverage elements, because it was specifically designed *not* to combine all beverage elements within the dispenser itself. (*Id.* at ¶¶133-135.) The Freestyle Dispenser dispenses unmixed micro-ingredients from its air-mix nozzle is a collection of beverage ingredients, or elements. (*Id.*) It is only upon the combination, or mixing of all dispensed ingredients, there forms a beverage. Beverage elements dispensed from the Freestyle combine in “mid-air,” and/or in a user’s cup, and do not combine until then.

It is physically impossible for the Freestyle Dispenser to contain a “component for directing the flow of *a beverage*” because a beverage exists

only after the beverage elements are dispensed, and no longer in contact with, the Freestyle. Therefore, RCDI's identification of the nozzle assembly as the "dispensing section" (Ex. 5 at ¶62) is false, and fails to prove infringement of the Claim.

**5. The Freestyle Dispenser Does Not Use Any "Valves" for Controlling an Amount of Element to be Dispensed**

There is no dispute that the "beverage elements" recited by Claim 11 must be contained in the dispenser "compartments" of Claim 11. (SUMF at ¶49.) The "compartment" of Claim 11 must be coupled by a "valve" to a "dispensing section." (Col. 9, ll. 46-48.) Claim 11 requires that those valves must be actuated by a controller "to control an amount of the element to be dispensed." (Col. 9, ll. 60-62.)

As stated above, it is undisputed that the Freestyle uses pumps – not valves – to pull micro-ingredients from each flavor cartridge. (*Id.* at ¶¶139-141.) Indeed, RCDI has never identified a valve used in the Freestyle to control the dispensing of a micro-ingredient, because no such valve exists. As RCDI's expert has admitted, a valve and a pump are not the same thing. (*Id.* at ¶57.)

RCDI's expert tries to save RCDI's infringement claims by also identifying water, carbonated water, and corn syrup as "elements of a beverage." (*Id.* at ¶52.) RCDI's expert does this, because only the dispensing of water, carbonated water, and corn syrup are controlled by valves in the Freestyle. (*Id.* at ¶138.) As noted above, however, water, carbonated water, and corn syrup are not contained within "compartments" in the Freestyle, as Claim 11 requires of all "elements of a beverage."

The only beverage ingredients in the Freestyle that are controlled by valves cannot be "elements of a beverage," because they are not contained in "compartments." And the only remaining beverage ingredients in the Freestyle, which could be said to be contained in "compartments" (i.e, micro-ingredients in micro-ingredient cartridges), cannot be "elements of a beverage," because they are dispensed by pumps.

Because the Freestyle has no valve for controlling the amount of an "element of a beverage" to be dispensed, it cannot infringe any claim of the '377 Patent.

**6. The Freestyle Dispenser Has No “User Interface Module”**

The Court construed “user interface module” to mean “a component of the beverage dispenser that enables direct communication between a user and the dispenser.” To prevail on infringement of Claim 11, therefore, RCDI must prove that the Freestyle has:

[a component of the beverage dispenser that enables direct communication between a user and the dispenser] configured to receive an identity of a user and an identifier of the beverage

The Court’s definition recognizes two aspects of this claim element that defeat RCDI’s infringement case.

First, the Court specifically recognized in its claim construction order, that one of ordinary skill in the art would understand the “user interface module” to be a physical component of the beverage dispenser of Claim 11. (Doc. 79 at 14, 15; SUMF at ¶68.5) This was an important holding, because RCDI’s original complaint claimed that the Freestyle App running on a cell phone was the “user interface module” of Claim 11. (Doc. 1, ¶29.) Because the Court held that the user interface module had to be physically part of the dispenser itself (Doc. 79 at 14, 15; SUMF at

¶68.5), RCDI's original infringement theory was nullified by this Court's claim construction order.

Second, the Court specifically included the term "direct" in its construction of "user interface module." This was an important holding, because it nullified RCDI's new theory of infringement as well. RCDI's new strategy is to simply ignore that the Court's claim construction ruling requires that the communication be direct. (*Id.*)

RCDI's expert, Mr. Curley, opines that the "user interface module" could receive "direct communications" of the identity of a user and the identifier of a beverage," from a user over the cellular telephone system, because "[c]ellular communications are a form of direct communication. If I call you on my cell phone, and you answer, we are speaking directly. That is direct communication." (Curley Rebuttal to Alexander (Ex. 16) at ¶52.)

Actually, the Court was quite clear about what it meant when it defined "user interface module" to specifically include "direct communications." The Court even anticipated RCDI's new infringement theory, when it noted that "[a]ccording to Rothschild, any type of

communication is included in the claim, and ***not just direct communication.***” By then including the word “direct” in its construction, the Court rejected RCDI’s effort to broaden the meaning of “user interface module” to also include communications that were not direct. Because RCDI now admits that a Freestyle user can only transmit information to a Freestyle dispenser using the cellular telephone network – and then through Coca-Cola’s CDA server – RCDI cannot prove at trial that the Freestyle has “a component of the beverage dispenser that enables direct communication between a user and the dispenser.” (*See* SUMF at ¶¶142-146.)

#### **B. The ’377 Patent is Invalid over the Prior Art**

Dr. Peter Alexander submitted an expert report in this case regarding the invalidity of the ’377 Patent. (Ex. 19; SUMF at Exs. 34-40.) Dr. Alexander’s report analyzes eight, separate prior art references (patents), which were not considered by the U.S. Patent Office during the examination of the ’377 Patent, and that, individually or in combination,

demonstrate that each asserted claim is invalid and should never have been issued by the United States Patent Office.<sup>2</sup>

# **1. RCDI's Expert Failed to Apply the Prior Art to the Asserted Claims**

Dr. Alexander has painstakingly analyzed various combinations of nine prior art references to demonstrate that the asserted claims of the '377 Patent are invalid. Seven tables setting forth his claim-by-claim, element-by-element invalidity analyses are attached to this Motion as exhibits (SUMF at Exs. 34-40.).

RCDI's expert, Charles Curley, has made the Court's review of the invalidity issues profoundly easier, by declining to rebut Dr. Alexander's invalidity analyses. Although Mr. Curley submitted a rebuttal to Dr. Alexander's report, and mentions each of the nine prior art references in

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<sup>2</sup> The Court is no doubt aware that U.S. Patent Office errors are unfortunately common. Indeed, in this very action, RCDI originally claimed that Coca-Cola had "willfully" infringed Claim 13 of U.S. Patent No. 8,788,090 (a "continuation patent" of the '377 Patent), but was forced to withdraw the '090 Patent, when Coca-Cola informed RCDI that the asserted claims had been accidentally printed on the issued patent in error by the U.S. Patent Office. RCDI never actually obtained a patent on the subject matter of Claim 13, and should never have asserted the claim against Coca-Cola or anyone else. (See, Ex. 8 at 6-8)

his rebuttal report, he provides no invalidity analysis of the asserted claims. (Curley Rebuttal Invalidity Report (Ex. 41)). Mr. Curley's rebuttal report does not even mention the elements of Claim 11 or any other claim of the '377 Patent. Though it would normally be appropriate for a jury to weigh the differences between the opinions of opposing expert witnesses, here there is nothing to weigh against Dr. Alexander's conclusions that the elements of the asserted claims are invalid over the prior art.

Although Coca-Cola bears the burden of proof of invalidity on summary judgment, the burden shifts to RCDI, once Coca-Cola has set forth a *prima facie* case of invalidity. Coca-Cola's *prima facie* case of invalidity is set forth below, along with specific references to the invalidity analyses in Dr. Alexander's attached reports (Exs. 19) and claims charts (SUMF at Exs. 34-40.) Other district courts have entered summary judgment of invalidity in situations like this one, in which a plaintiff's expert declines to meaningfully rebut the defendant's *prima facie* case of invalidity. (*E.g., Commissariat a l'Energie Atomique v. Samsung Elecs. Co.*, 524 F. Supp. 2d 520(D. Del. 2007)).

The Federal Circuit Court of Appeals has made clear that Mr. Curley's invalidity analysis is not a proper invalidity analysis because he fails to provide a claim-by-claim analysis. As with an infringement analysis, an invalidity analysis must be performed on a claim-by-claim basis. See, e.g., *Default Proof Credit Card Sys. v. Home Depot U.S.A.*, 389 F. Supp. 2d 1325, 1353-1354 (S.D. Fla. 2004), *aff'd sub nom*; *Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc. (d/b/a The Home Depot)*, 412 F.3d 1291 (Fed. Cir. 2005); *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1351 (Fed. Cir. 2001) ("whether performed at the preliminary injunction stage or at some later stage in the course of a particular case, infringement and ***validity analyses must be performed on a claim-by-claim basis***")

In *Commissariat a l'Energie Atomique v. Samsung Elecs. Co.*,<sup>3</sup> the District Court of Delaware granted summary judgment of invalidity to the defendant (Samsung), because the plaintiff (CEA) "did not directly

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<sup>3</sup> *Commissariat a l'Energie Atomique v. Samsung Elecs. Co.*, 524 F. Supp. 2d 520, 526-528 (D. Del. 2007).

respond to the element-by-element anticipation analysis presented in Samsung's opening brief.” The Delaware court resolved that:

Instead, [Plaintiff] makes several general arguments as to why [the prior art reference] does not anticipate the [asserted patent] as well as arguing that particular elements of the claims at issue here are not disclosed in [the prior art reference]. Because [Defendant] bears the burden of establishing that each element of the claims at issue are disclosed in [the prior art reference], the court will review [Defendant] evidence on each element whether or not [Plaintiff] responded to [Defendant's] evidence as to a particular element.

After reviewing plaintiff's invalidity analysis, the court found that the plaintiff's “general arguments do not rebut [Defendant's] *prima facie* evidence of anticipation.”

Here, as in *Commissariat*, RCDI has failed to rebut Coca-Cola's *prima facie* evidence of anticipation. The appropriate scope of Mr. Curley's testimony at trial regarding invalidity (if any), would be limited to his opinions in his rebuttal report on invalidity. Because Mr. Curley cannot provide a substantive rebuttal to Dr. Alexander's invalidity

analyses at trial, and cannot provide a claim-by-claim analysis of the asserted claims, the jury would have no meaningful expert testimony to weigh against Dr. Alexander's invalidity analysis.

The Court should grant summary judgment of invalidity, because a trial of the invalidity issue has been rendered unnecessary by RCDI's expert's failure to rebut Coca-Cola's prima facie case of invalidity of the asserted claims.

## **2. The '377 Patent Is Invalid Over the Boland Reference**

U.S. Patent No. 7,762,181 to Michael John Boland, et al., titled "Customised nutritional food and beverage dispensing system," issued on July 27, 2010 ("Boland"). (SUMF at Ex. 38, at 1.) The Boland patent resulted from Application No. 11/241,456, filed on September 30, 2005. (*Id.*) Boland is prior art to the '377 Patent, because its September 30, 2005 filing date predates the June 20, 2006 filing date of the '377 Patent.

Boland anticipates Claims 11, 12, and 21-23 of the '377 Patent. (*Id.* at 1-57.) Independent Claim 11 and dependent claims 12 and 21-23 of the '377 Patent recite a beverage dispenser capable of communicating with a server over a network, a user interface module within the

dispenser that receives the identity of a user and the identifier of the beverage from a user, and a communication module within the dispenser that transmits the identity of a user and identity of the beverage to a server. (*See generally*, Doc. 1-1.)

Boland discloses a beverage dispenser that dispenses customized beverages to a user, based on the user's preference profile data, by combining beverage ingredients stored within the dispenser:

A system for dispensing a customized nutritional serving is made up of ingredients stored within a device incorporating the system. The device has a controller in whose memory is stored an inventory of the ingredients available in the device, their compositions and properties and customer profile data. The controller is programmed to formulate a serving which best matches the customized serving selected by the customer within constraints set by the programming taking into account the inventory of ingredients and the health profile of the customer...The device is then programmed to prepare and dispense the final selection.

(SUMF at Ex. 38, at 1 (Boland at Abstract.))

Specifically, Claim 1 of Boland anticipates many elements of Claim 11 of the '377 Patent by providing the following generic framework for a beverage dispenser:

1. A system for dispensing a customized nutritional serving which comprises:  
an **ingredient storage module**;

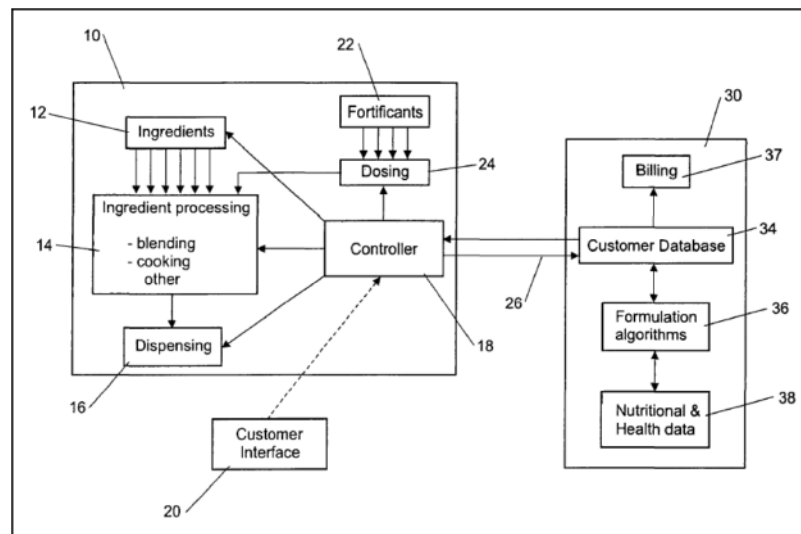
an **ingredient processing module**;  
a **serving dispenser**;  
a **customer interface**; and  
a **controller** operatively **linked to the customer interface**  
and programmed to control the storage module, the processing  
module and the serving dispenser;  
*Id.* at 1-2 (emphasis added).

The text of Claim 1 of Boland makes clear that “ingredient storage module” anticipates Claim 11’s “compartment containing elements of a beverage”; the “ingredient processing module” anticipates “mixing chamber;” the “serving dispenser” anticipates “dispensing section”; the “customer interface” anticipates “user interface module;” and the “controller” anticipates “controller.” (*Id.* at 1-43.)

As recited in claim 1 of Boland, the controller in the system formulates and dispenses a nutritional serving to the user based on user information stored in its system. (*Id.* at 2) This, functionality, along with the “formulation algorithms” that “determine quantities of ingredients” disclosed in Boland (*id.* at 55-57) anticipates Claim 23 of the ’377 Patent, which requires the product preference to be a formulation that has a “predetermined amount of at least one element.” (*Id.*)

Boland’s “controller operatively linked to the customer interface” anticipates Claim 12 of the ’377 Patent, which recites a “user interface module is ...configured to receive the product preferences of the user.” (*Id.* at 44-45.)

Boland illustrates the entire system in Figure 1, which is reproduced below. Boland describes dispensers that can operate as stand-alone systems, but also describes the additional benefits to users provided by connecting the dispensers to a network via a central server. (*Id.* at 3-4.) Two major components of the Boland system are the dispenser 10 and the server 30. In a networked system, the two components are physically separate, and communicate over network connections. (*Id.*)



(*Id.* at 4.)

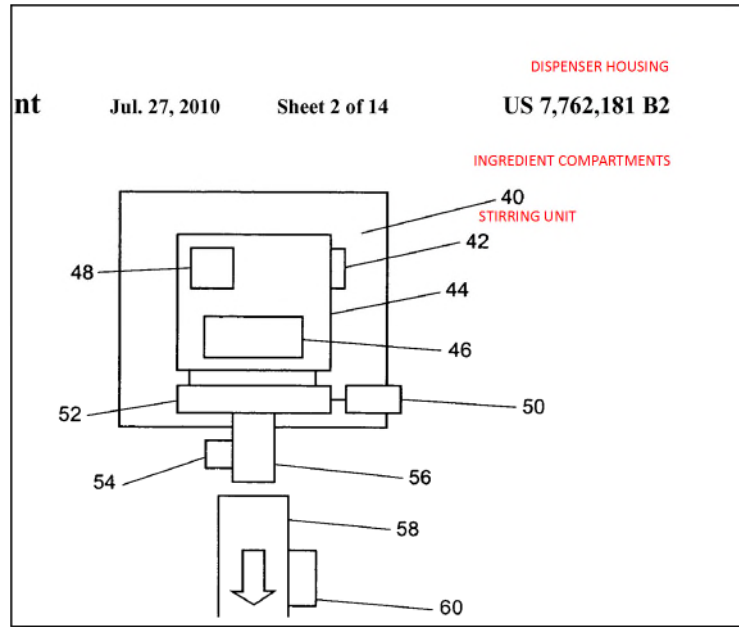
The system according to the invention has both hardware components and software components. In the embodiment of FIG. 1 dispenser 10 is separate with from the server 30. Dispenser 10 and server 30 are in electronic communication with each other.

(*Id.*)

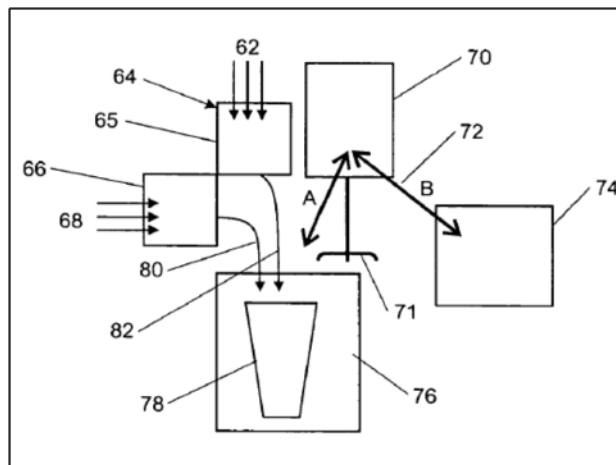
The server's (30) functions including customer databases 34 (Figure 1) are integral to the dispenser 10. (*Id.*) This system is analogous to the networked beverage dispenser in Claim 11. (*Id.* at 1-43.) As shown in Fig. 1, the "controller" of Boland communicates with the "customer database." This anticipates the "communication module" of the Claim 11 that communicates with the "server." (*Id.* at 26-43.)

The figure below shows an "environmental control unit 40" that holds the "ingredient storage containers 44." (*Id.* at 6-7.)

Additionally, a mixing "an ingredient agitation/stirring unit 46 is provided to assist in advancing the powdered ingredients" from ingredient storage containers. (*Id.*)



Furthermore, ingredients from ingredient storage containers are fed into mixing manifolds (*id.* at 7-8):



(*Id.*).

A liquid ingredient manifold 66 is also provided. Manifold 66 is in communication with liquid sources 68. Below the manifolds 65 and 66 is a cup dispensing mechanism 76 of the type commonly found

with beverage dispensing machines. A cup 78 is illustrated. The paths of ingredients and liquids to be dispensed into cup 78 are illustrated by arrows 80 and 82.

(*Id.*).

Therefore, the “ingredient agitation/stirring unit” and “liquid ingredient manifold” disclosed by Boland further anticipates “mixing chamber” in Claim 11. (*Id.* at 19-21.)

Claim 21 of the '377 Patent, which recites a user interface module that displays and receives product preferences from the user, is anticipated by Boland's disclosure of a beverage display that can be modified or confirmed through the user interface (*Id.* at 11:41-44, 12:1-6). (*Id.* at 51.)

Similar to Claim 21, Claim 22 of the '377 Patent recites a user interface module that receives product preferences from the user and a communication module that transmits them to the server. Boland also anticipates Claim 22 by disclosing a beverage display that can be modified or confirmed through the user interface, and sent to the server via the “controller,” discussed above. (*Id.* at 52-54.)

### 3. The '377 Patent Is Invalid as Rendered Obvious by the Wilmott Reference and by Combinations of Six Other Prior Art References

Dr. Alexander's report analyzes eight, separate prior art references (patents) that, individually or in combination, demonstrate that each asserted claim is invalid and should never have been issued by the United States Patent Office. Dr. Alexander concluded that every claim limitation of every claim was disclosed in the relevant prior art, prior to Mr. Rothschild's purported date of invention, June 20, 2006. Dr. Alexander's conclusions are summarized in the table below, and are set forth in detail in the claims charts attached to this Motion as an exhibit. (SUMF at Exs.34-40.)

<b>Prior Art and Combinations</b>	<b>Invalidity Basis</b>	<b>Invalid Claims</b>	<b>Cite</b>
Gutwein-Rudick	Obviousness	11-13, 17, 21-23	SUMF at Ex. 34
Gutwein-Lassota	Obviousness	11-13, 17, 21-23	SUMF at Ex. 35
Gutwein-Bartholomew	Obviousness	11-13, 17, 21-23	SUMF at Ex. 36
Gutwein-Schroeder	Obviousness	11-13, 17, 21-23	SUMF at Ex. 37
Boland	Anticipation	11-13, 17, 21-23	SUMF at Ex. 38
Knoell-Bartholomew	Obviousness	11-13, 17, 21-23	SUMF at Ex. 39
Wilmott	Obviousness	11-13, 17, 21-23	SUMF at Ex. 40

**C. Coca-Cola is Entitled to Summary Judgment of No Willful Infringement**

There is no evidence in the record to support RCDI's willful infringement claim. In its original complaint, RCDI alleges that it "is informed and believes, and on that basis alleges, that Coca-Cola's infringement of the '377 patent has been willful." (Doc. 1 at ¶41.) The only facts averred in the original complaint that might support this claim is the allegation that "[o]n at least one prior occasion, [RCDI] approached Coca-Cola regarding the taking of a license to the '377 patent, but Coca-Cola has thus far failed to do so." (Doc. 1 at ¶41.)

Coca-Cola took a 30(b)(6) deposition of RCDI, and the individual deposition of its principal, and the named inventor of the '377 Patent, Leigh Rothschild. When asked about RCDI's alleged license offers to Coca-Cola, he testified he had no personal knowledge of whether RCDI's alleged offer (an email) was ever received or responded to by anyone at Coca-Cola. (Transcript of May 11, 2017 Rule 30(b)(6) Deposition of RCDI at 173-183.) Nor was he aware of whether anyone else had contacted Coca-Cola on RCDI's behalf. (*Id.*)

The Court should enter summary judgment of no willful infringement, because there is no admissible evidence in the record to support a determination that (1) Coca-Cola's infringement of the '377 patent has been willful, that (2) Coca-Cola was ever aware of the '377 Patent prior to this action, or (3) that RCDI ever approached or contacted Coca-Cola with an offer to take a license to the '377 Patent.

## **V. CONCLUSION**

For the reasons set forth above, Coca-Cola respectfully requests the Court enter summary judgment of (1) no infringement of the asserted claims of the '377 Patent; (2) invalidity of the asserted claims of the '377 Patent; and (3) no willful infringement.

Respectfully Submitted: August 9, 2018

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### **CERTIFICATE OF SERVICE**

I hereby certify that on August 9, 2018, I electronically filed the foregoing document with the Clerk of Court using the CM/ECF system, which will automatically send e-mail notification of such filing to all counsel of record who are deemed to have consented to electronic service.

/s/ A. Shane Nichols

A. Shane Nichols  
Georgia Bar No. 542654  
ALSTON & BIRD LLP

***ATTORNEY FOR  
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COLA COMPANY***

**CERTIFICATE OF COMPLIANCE WITH LR 5.1**

I hereby certify that the foregoing document is written in 14 point Century Schoolbook font in accordance with Local Rule 5.1.

/s/ A. Shane Nichols

A. Shane Nichols  
Georgia Bar No. 542654

***ATTORNEY FOR  
DEFENDANT THE COCA-  
COLA COMPANY***